Contracts to Be Let

Bids received until Feb. 20, 1915.

Twenty-Inch Water Main

Middletown, N. Y.

Sealed proposals indorsed "Proposals for laying twenty inch cast iron water main" will be received at the office of the Commissioner of Public Safety at the City Hall, Middletown, N. Y., until 4 P.M. on Saturday, February 20th, 1915, when they will be publicly opened and read.

Proposals shall be accompanied by a certified check payable to the order of the Treasurer of the City of Middletown, N. Y., in the sum of Five Hundred Dollars. Approximate quantities are as follows:

A. Chopping, clearing and draining.
B. 2,510 lin.ft. of trenching and refilling.
C. 1,600 lin.ft. of deep trenching and refilling.
D. 1,890 lin.ft. of grading and embankment over pipe.
E. 6,000 lin.ft. of laying, jointing and caulking 20" pipe.
F. All testing pipes under pressure.

The right is reserved to reject any or all proposals or bids. Bond in the amount of not less than 50% of the contract price will be required for the proper performance of the contract. Plans and specifications can be obtained at the office of the Commissioner of Public Safety, No. 15 City Hall, Middletown, N. Y.

J. C. DEGNAN,
Commissioner of Public Safety.

Bids received until Feb. 17, 1915.

Furnishing Cement

STATE OF ILLINOIS
STATE HIGHWAY DEPARTMENT
Springfield, Illinois.

Notice is hereby given that sealed proposals for furnishing approximately 235,500 barrels of cement to be used in State Aid Road construction for the year of 1915 will be received at the office of the State Highway Commission, Springfield, Illinois, until 11:00 o'clock A.M., February 17, 1915.

All proposals must be made on forms furnished by the State Highway Commission, without any addition or modification whatsoever.

All proposals otherwise submitted will be rejected as irregular.

The State Highway Commission reserves the right to reject any or all proposals.

Full information may be obtained by writing direct to the State Highway Commission, Springfield, Illinois.

STATE HIGHWAY COMMISSION,
By WM. W. MARR,
Chief State Highway Engineer.

January 30, 1915.

Bids received until Feb. 15, 1915.

Concrete Reservoir

Tampa, Fla.

Sealed proposals will be received, until twelve o'clock noon, February 15th, 1915, at the office of the Tampa Water Works Company, Tampa, Florida, addressed to Chester R. McFarland, General Manager, for a reinforced concrete reservoir about 206 feet long by about 125 feet wide by about 20 feet deep, in accordance with plans and specifications to be furnished by the said Company. A deposit of twenty-five dollars will be required for a copy of the above mentioned plans and specifications. Each bid must be accompanied by a certified check for twenty-five hundred dollars ($2,500), on a National Bank of Tampa, Fla., or Philadelphia, Pa., and made payable to the order of the Tampa Water Works Co. The successful bidder will be required to file with the Tampa Water Works Co., to insure the faithful performance of the contract, a surety bond acceptable to the Water Works Co. for fifty per cent. of the contract price. The Tampa Water Works Co. reserves the right to reject any or all bids.

Bids received until Feb. 24, 1915.

Intercepting Sewers

OFFICIAL NOTICE NO. 9.

PUBLISHED BY AUTHORITY OF THE SEWERAGE COMMISSION OF THE CITY OF MILWAUKEE.

Milwaukee, Wis., January 15, 1915.

Sealed proposals for constructing intercepting sewers and connections on both sides of the Milwaukee River in the City of Milwaukee will be received by the Sewerage Commission at its office in the City Hall until 2:00 P.M. on the 24th day of February, A.D. 1915, at which place and time the proposals will be publicly opened and read.

The work to be done is divided into two separate contracts numbered 9 and 10.

Number 9 embraces the construction of an intercepting sewer and branches on the east side of Milwaukee River from a point below the Dam to the intersection of Broadway and Detroit Streets, and requires the construction of approximately:

7927 ft. brick and concrete sewer in open cut from 30" to 51" diameter.
3992 ft. brick and concrete sewer in tunnel from 30" to 51" diameter.
3844 feet terra cotta pipe sewer from 10" to 24" diameter.
1762 feet of manholes and pile and timber foundations.

Number 10 embraces the construction of an intercepting sewer and branches on the west side of Milwaukee River from the Holton Street viaduct to the intersection of West Water and Fowler Streets and requires the construction of approximately:

8480 ft. brick and concrete sewer in open cut from 30" to 48" diameter.
2340 feet terra cotta pipe sewer in open cut from 10" to 18" diameter.
1105 feet of manholes and pile and timber foundations.

All as shown upon the plans and described in the specifications now on file in the office of the Sewerage Commission.

The time allowed for completing each contract shall be two hundred and fifty (250) working days. (Working days meaning such as are particularly described in the contract.)

The liquidated damages for not completing the work within the time agreed shall, for each day's delay, be an amount equal to one-half of one percentum of the aggregate cost of the work embraced in the contract.

Each proposal must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a national or state bank doing business in the City of Milwaukee, to the order of the "Sewerage Commission of the City of Milwaukee," for the following sums; failing in which the bid will be rejected:

For proposals Number 9, $38,500.00.
For proposal Number 10, $25,000.00.

Specifications and blank forms of proposals can be obtained, and details plans examined, at the office of the Sewerage Commission in the City Hall.

The prices must be written in the proposal and also stated in figures. In case of variation the written prices will prevail.

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Commission after the contract has been awarded or after the rejection of all bids. The cash deposit or certified check which may be deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and Sewerage Commission.

Full sets of detail plans will be sent to any contractor desiring to bid upon receipt of ten dollars ($10.00).

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES, Secretary.

Countersigned:
LOUIS M. KOTECKI, Comptroller.

U. S. ENGINEER OFFICE, 405 Customhouse, Cincinnati, O., January 30, 1915.—Sealed proposals for constructing and delivering two steel Fuel Flats Nos. 18 and 19, and one steel Barge No. 15, will be received at this office until 2 p.m., March 2, 1915, and then publicly opened. Information on application. H. JERVEY, Lt. Col., Engrs.

Bids received until Feb. 23, 1915.

Green Houses

Ithaca, N. Y.

Sealed proposals for Green Houses, Construction, Heating and Plumbing and Electric Work at the New York State College of Agriculture, Cornell University, Ithaca, N. Y., will be received by Mr. E. L. Williams, Comptroller, Cornell University, Ithaca, N. Y., until Tuesday, February 23rd, 12 M., when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a certified check in the sum of Nine hundred Dollars ($900.00) for Construction Work, in the sum of Three hundred Dollars ($300.00) for Heating Work and in the sum of Fifty Dollars ($50.00) for Plumbing Work and in the sum of Seventy-five Dollars ($75.00) for Electric Work. Contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. of the amount of contract within thirty (30) days from date of official notice of award of contract and in accordance with the terms of specification Nos. 2130, 2151, 2152 and 2153. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York State College of Agriculture, Cornell University, Ithaca, N. Y., at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of Ten Dollars ($10.00) made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Bids received until Feb. 18, 1915.

Sanitary Work in Hospital

Rochester, N. Y.

Sealed proposals for the new sanitary work in the North Building of the Rochester State Hospital, Rochester, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2:30 P.M. on Thursday, February 18, 1915, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed and shall be accompanied by a certified check in the sum of 5% of the amount of bid. The contractor to whom the award is made will be required to furnish surety company bond in the sum of 50% of the amount of contract within thirty (30) days after official notice of award of contract, and in accordance with the terms of specification No. 1956. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the Rochester State Hospital, Rochester, N. Y.; at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of $10 made payable to the State of New York, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Bids received until Mar. 2, 1915.

Proposals for Road Oil

Wilkes-Barre, Pa.

SEALED PROPOSALS will be received at the City Clerk's Office, Wilkes-Barre, Pennsylvania, until Tuesday, March 2nd, 1915, at 12 o'clock noon, for furnishing and delivering F.O.B. cars, Wilkes-Barre, Pennsylvania, Forty Thousand (40,000) gallons of road oil, more or less. The bidder will quote prices by the barrel, tank car or otherwise and will plainly give the name or brand of oil bid on, and must submit samples with proposal. Proposals will be endorsed "Proposals for Road Oil" and addressed to Fred H. Gates, City Clerk, and each bid must be accompanied by a certified bank check of the bidder in the sum of Two Hundred Dollars ($200.00), conditioned upon entering into a contract with the City, otherwise no action will be taken on the bid submitted. The City reserves the right to reject any or all bids received.

CHARLES N. LOVELAND, Superintendent,
Department of Streets and Public Improvements.

Bids received until Mar. 4, 1915.

Building Construction

Newark, N. Y.

Sealed proposals for Cottage for ninety-two inmates, Construction, Heating, Plumbing and Electric Work and for Hospital Building, Construction, Heating, Plumbing and Drainage and Electric Work at the New York State Custodial Asylum for Feeble Minded Women, Newark, N. Y., will be received by Dr. Henry H. Stebbins, President, Board of Trustees, New York State Custodial Asylum for Feeble Minded Women, Newark, N. Y., until 12 o'clock Noon, March 4th, 1915, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. of the amount of bid. Contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. of the amount of contract within thirty (30) days from date of official notice of award of contract and in accordance with the terms of specification Nos. 2055, 2076, 2077, 2078, 2117, 2121, 2122 and 2123. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York State Custodial Asylum for Feeble Minded Women, Newark, N. Y.; at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice and upon the deposit of a certified check in the sum of Ten Dollars ($10.00) made payable to the State of New York for each set of plans and specifications, which check will be returned if the plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Bids received until Feb. 12, 1915.

New Floors in Cottages

Hudson, N. Y.

Sealed proposals for New Floors in Cottages 1-2-3-4 at the New York State Training School for Girls, Hudson, N. Y., will be received by Miss Mary Hinkley, President of the Board of Managers, New York State Training School for Girls, Hudson, N. Y., until Friday, February 12, 1915, at 2 P.M., when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of 5% of the amount of bid. Contractor to whom the award is made will be required to furnish surety company bond in the sum of 50% of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of specification No. 2205. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York State Training School for Girls, Hudson, N. Y.; at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher.

Bids received until Feb. 18, 1915.

Fabius River Drainage District—3

SCOTLAND, KNOX, CLARK AND LEWIS COUNTIES, STATE OF MISSOURI.

Sealed bids will be received by the Supervisors of the Fabius River Drainage District No. 3 at the office of F. H. McCullough, Edina, Missouri, until 11:00 o'clock A. M., February 18, A.D. 1915, for the construction of channels for the Fabius River Drainage District No. 3. There are about 500,000 cubic yards of channel excavation. The work has been divided into two sections.

For further information inquire of Harman Engineering Co., 144 Fredonia Ave., Peoria, Ill.

Jacob A. Harman, Chief Engineer.

Jan. 20, 1915.

U. S. ENGINEER OFFICE, First District, New York City, Room 710, Army Building, 39 Whitehall Street, New York, N. Y., Jan. 30, 1915.—Sealed proposals for constructing one motor launch will be received at this office until 12 M., February 15, 1915, and then publicly opened. Information on application. W. M. BLACK, Col. Engrs.

Bids received until Mar. 12, 1915.

Proposals for Street Paving

Wilkes-Barre, Pa.

SEALED PROPOSALS will be received at the City Clerk's Office, Wilkes-Barre, Pennsylvania, until Friday, March 12th, 1915, at 12 o'clock Noon, for curbing and paving streets in the City of Wilkes-Barre, Pennsylvania. Bids to be submitted in accordance with specifications, copies of which may be had upon application to B. K. Finch, City Engineer, upon the payment to him of the sum of Five Dollars ($5.00), which will be refunded to bidders, provided specifications are returned to the City Engineer on or before March 15th, 1915. Bids to be submitted as follows:—For sheet asphalt in two sections, totaling about 40,000 square yards; For vitrified brick in four sections totaling about 46,000 square yards; For cobblestone in one section of 600 square yards; For vitrified brick and macadam in one section of 7,500 square yards, together with the necessary red stone, blue stone or concrete curbing. Certified bank check for Five Hundred Dollars ($500.00) to accompany each bid except for cobblestone, which will be for One Hundred Dollars ($100.00). Proposals to be endorsed "Proposals for curbing or paving" and addressed to Fred H. Gates, City Clerk. The City Council reserves the right to reject any or all bids received.

CHARLES N. LOVELAND, Superintendent,
Department of Streets and Public Improvements.

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U. S. ENGR. OFFICE, Boston, Mass., Jan. 18, 1915.—Sealed proposals for dredging in Chelsea Creek, Boston Harbor, Mass., will be received here until 12 M., Feb. 18, 1915, and then publicly opened. Information on application. W. E. CRAIGHILL, Lieut. Col., Engrs.

U. S. ENGINEER OFFICE, 305 Southern Building, Washington, D. C., Jan. 18, 1915.—Sealed proposals for substitution of through span for deck span in the Pennsylvania Avenue Bridge across Anacostia River, Washington, D. C., will be received at this office until Feb. 17, 1915, and then publicly opened. Information on application. H. C. NEWCOMER, Lt. Col., Engrs.

U. S. ENGINEER OFFICE, First District, New York City, Room 710 Army Building, 39 Whitehall Street, New York, N. Y., January 12, 1915.—Sealed proposals for dredging in Harlem River, N. Y., will be received at this office until 12 M., February 11, 1915, and then publicly opened. Information on application. W. M. BLACK, Col. Engrs.

U. S. ENGINEER OFFICE, First District, New York City, Room 710, Army Building, 39 Whitehall Street, New York, N. Y., January 23, 1915.—Sealed proposals for dredging in Port Chester Harbor, N. Y., will be received at this office until 12 M., February 23, 1915, and then publicly opened. Information on application. W. M. BLACK, Col., Engrs.

U. S. ENGINEER OFFICE, Savannah, Ga., January 25, 1915—Sealed proposals for furnishing and placing stone for raising low places in jetty at Savannah Harbor, Ga., will be received at this office until 12 Noon (Eastern Standard Time) February 24, 1915, and then publicly opened. Information on application. W. C. LANGFITT, Col., Engrs.

U. S. ENGINEER OFFICE, Galveston, Texas, Feb. 2, 1915.—Sealed proposals for dredging at Port Aransas, Texas, and in the Channel from Aransas Pass to Corpus Christi, Texas, will be received at this office until 12 o'clock noon, March 3, 1915, and then publicly opened. Information on application. C. S. RICHE, Lieut. Col., Engineers.

U. S. ENGINEER OFFICE, Room 802, Army Building, 39 Whitehall Street, New York City, February 4, 1915.—Sealed proposals for dredging in Woodbridge Creek, Raritan Bay, and Shrewsbury River, N. J., will be received at this office until 12 M., February 19, 1915, and then publicly opened. Bids for any or all of these works will be considered. Information on application. FREDERIC V. ABBOT, Colonel, Engineers.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., January 28, 1915.—Sealed proposals will be received in this office until 3 o'clock p.m. March 11, 1915, and then opened, for the mechanical equipment (except elevator) of the experiment station, United States Bureau of Mines, Pittsburgh, Pa., in accordance with drawings and specifications, copies of which may be obtained at this office, in the discretion of the Supervising Architect. O. WENDEROTH, Supervising Architect.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 1, 1915.—SEALED PROPOSALS will be opened in this office at 3 p.m., March 25, 1915, for the construction complete (including mechanical equipment—except elevator—lighting fixtures, and approaches) of the United States Post Office and Court House at Pendleton, Oregon. Three-story and basement, fireproof building; ground area, 5,500 square feet; stone, terra-cotta, and brick facing. Drawings and specifications may be obtained, after February 11, 1915, from the Custodian of site at Pendleton, Oregon, or at this office, in the discretion of the Supervising Architect. O. WENDEROTH, Supervising Architect.

Bids received until Feb. 16, 1915.

New York State Hospital

West Haverstraw, N. Y.

Sealed proposals for the new Hospital Building, Construction, Heating, Plumbing and Drainage, Electric Work and Electric Elevator at the New York State Hospital for Crippled and Deformed Children, West Haverstraw, N. Y., will be received by Mr. George Blagden, President of the Board of Managers, New York State Hospital for Crippled and Deformed Children, West Haverstraw, N. Y., until Tuesday, February 16th, 1915, at 1 P.M., when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of Twelve hundred Dollars ($1200.00) for Construction Work, in the sum of five per cent. of the amount of bid for Heating Work, in the sum of One hundred and fifty Dollars ($150.00) for Plumbing Work, in the sum of five per cent. of the amount of bid for Electric Work and Electric Elevator. Contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of specifications Nos. 2079, 2081, 2082, 2083 and 2084. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York State Hospital for Crippled and Deformed Children, West Haverstraw, N. Y.; at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice and upon the deposit of a certified check in the sum of Ten Dollars ($10.00) made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

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Bids received until Feb. 16, 1915.

Sanitary Sewerage System and Sewage Disposal Plant

Lodi, Medina Co., Ohio.

LEGAL NOTICE

Sealed bids will be received by G. C. Rice, Village Clerk of the Village of Lodi, Medina County, Ohio, until 12 o'clock noon, Central Standard Time, on the 16th day of February, 1915, for furnishing the necessary labor and materials for the construction of a sanitary sewerage system and sewage disposal plant, in accordance with the plans and specifications therefor, on file in the office of said Clerk, and also on file in the office of the Engineer.

The sewerage system includes about six miles of pipe, from 4 to 12 inches in diameter, with some 60 manholes and 19 flush tanks.

The sewage disposal plant includes a small settling tank, dosing appliance, and sand filtration area.

Details of all are contained in the specifications, and shown upon the plans, copies of which may be seen at the above mentioned offices, and the specifications had from the Village Clerk.

Bidders, who desire, may receive complete copies of plans, by sending the sum of Five Dollars ($5.00) to the Engineer at his Pittsburgh office.

G. C. RICE, Village Clerk,
Lodi, Ohio.

MR. L. E. CHAPIN, Engineer,
1017 Frick Bldg., Pittsburgh, Pa., and 1312 Woodland Avenue, Canton, O.

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U. S. ENGINEER OFFICE, Trust Company Building, Postoffice and Tremont Sts., Galveston, Texas, January 25, 1915.—Sealed proposals for construction of motor dredge tender, "La Porte," will be received at this office until 12 o'clock, noon, February 23, 1915, and then publicly opened. Information on application. C. S. RICHE, Lt. Col., Engineers.

U. S. ENGINEER OFFICE, Cincinnati, O., January 27, 1915.—Sealed proposals for constructing and delivering two steel hull sternwheel towboats "Cayuga" and "Ottawa" will be received at this office until 2 p.m., February 26, 1915, and then publicly opened. Information on application. H. JERVEY, Lt. Col., Engrs.

Classified Advertising

Positions Wanted, 3 cents a word, minimum charge 50 cents an insertion, payable in advance.

Positions Open, (Civil Service Examinations), **Employment Agencies** (Labor Bureaus), **Business Opportunities, Wanted** (Agents and Salesmen—Contract Work), **Miscellaneous** (Educational—Books), **For Sale,** 5 cents a word, minimum charge $1.00 an insertion.

Count four words for keyed address care of New York; five for Chicago. Abbreviated words or symbols count as full words.

Copy should reach us not later than 10 A.M. Wednesday for that week's issue. Answers addressed to our care, Tenth Avenue at Thirty-sixth St., New York or 1144 Monadnock Block, Chicago will be forwarded (excepting circulars or similarliterature).

No information given by us regarding keyed advertiser's name or address. Original letters of recommendation or other papers of value should not be inclosed to unknown correspondents. Send copies.

Advertisements calling for bids, $3.60 an inch per insertion. N

POSITIONS WANTED

Mechanical and Electrical Engineers

MECHANICAL ENGINEER, 34, technical school and 12 years' broad experience, desires position, in or near New York preferred. P. W. 730, Eng. News.

Civil Engineers

ENGINEER, 14 years' experience; surveys on railroad location and construction, irrigation, drainage, United States Geological, subdivisions, flood prevention and sewers. Flitman, 7 West Harrison, Danville, Ill.

CIVIL ENGINEER, four years' experience structural steel and reinforced concrete; position with city or county engineer desired; experience desired rather than large salary. P. W. 714, Eng. News, Chicago.

CIVIL ENGINEER, 25, technical graduate with two years' varied construction experience, will accept anything reasonable, efficient, well recommended. P. W. 770, Eng. News, Chicago.

CIVIL ENGINEER, water-works manager, and superintendent, sixteen years' experience engineering work, seven years of which water-works superintendence and construction, with municipal corporation. Now engaged; desires water-works position. P. W. 771 Eng. News.

GRADUATE CIVIL ENGINEER, 24, desires position. Two years' experience structures and concrete. P. W. 774, Eng. News.

ENGINEER, 37, with 12 years' experience in design, construction and economies of hydro-electric and water-front developments, also fireproof buildings, desires position of trust and adequate renumeration. P. W. 784, Eng. News, Chicago.

CIVIL ENGINEER; good technical education; six years' experience in field, drafting and design, timber, steel and concrete structures (specializing in reinforced concrete); tracks, yards and earthwork; on heavy railroad construction and Panama Canal. P. W. 820, Eng. News.

CIVIL ENGINEER, Assoc. M. Am. Society of Civil Engineers, sixteen years' experience in charge of heavy railroad construction, field and office general engineering surveys and estimates open for engagement March 1. P. W. 824, Eng. News.

EXPERIENCED CONSTRUCTION ENGINEER, good executive, manager, superintendent, designer, estimator, on bridges, concrete, railway construction; position desired with contractor, engineers or controllers of public utilities; university graduate; salary reasonable. P. W. 823, Eng. News.

CIVIL ENGINEER; graduate, 12 years' practical experience with consulting engineers and utility companies; water works and other utilities; investigations, reports, design, construction, appraisals. References. P. W. 825, Eng. News.

CIVIL ENGINEER, technical graduate; 24; two years' experience, railroad and maintenance and concrete bridge design and construction; position with engineers or contractors; go anywhere, immediately. P. W. 790, Eng. News.

GRADUATE ENGINEER, available immediately, 8 years' experience, 5 in charge of work; reinforced concrete, hydro-electric developments, including investigation and construction, brick pavements and railroads; excellent references. P. W. 796, Eng. News.

CIVIL ENGINEER, technical graduate. Three years' experience in the construction of water supply and sewage disposal plants, general building construction, pipe lines, and steel structures, as engineer and draftsman, desires position with engineer or contractor. At liberty after March 1. P. W. 803, Eng News.

RECENT GRADUATE CIVIL ENGINEERING wants opportunity where energy, thoroughness and some ability will bring results. P. W. 801, Eng. News, Chicago.

YOUNG MAN—Technical graduate, 3 years' experience office and field, well recommended. Engineer or contractor. P. W. 799, Eng. News.

GRADUATE CIVIL ENGINEER: 6 years' experience, structural drafting railroad work and factory construction. P. W. 809, Eng. News.

GRADUATE CIVIL ENGINEER, 37; 12 years' experience and in charge of construction, sewers, roads, pavements, bridges and tunnels. Good executive. References. P. W. 814, Eng. News.

Bridge and Structural

CHIEF DRAFTSMAN, charge 60 men, desires change; age 35; strong personal force; proved executive ability; 14 years' comprehensive experience. P. W. 520, Eng. News.

BRIDGE AND STRUCTURAL ENGINEER with long experience holding responsible positions wishes to change location. P. W. 751, Eng. News.

STRUCTURAL ENGINEER, 18 years' experience in steel concrete, general engineering and building construction, office and field; is open for position. Best of references. Address, M. O. B., 129 N. Pryor St., Atlanta, Ga.

Surveyors

INSTRUMENTMAN, topographer, map, draftsman; thorough experience, own instruments; first class. P. W. 785, Eng. News, Chicago.

SURVEYOR—Will sign contract, transitman, timekeeper, South American preferred. Experience, seven years topographic, hydrographic, inspector, timekeeper construction, transitman tunnel work. Best references. P. W. 813, Eng. News.

Draftsmen

DRAFTSMAN; age 22, experience, would like position in architects office or civil engineers office. Now employed. P. W. 797, Eng. News.

YOUNG MAN—Architectural student for the past 2 years, wishes position with architectural or structural engineer. Several years' experience in interior design and some architectural experience. P. W. 791, Eng. News.

FIRST CLASS mechanical draftsman, cranes and hoisting machinery, designing or detail work. P. W. 818, Eng. News.

Superintendents, Etc.

YOUNG MAN, 28, business and engineering experience, wishes to learn purchasing with engineers, contractor or railroad; will start at moderate salary; go anywhere. P. W. 787, Eng. News.

SUPERINTENDENT of cement plant, age thirty-six, good construction man or operator, desires change available on short notice. P. W. 776, Eng. News.

CONTRACTORS ENGINEER, graduate of Mass. Inst. Technology, 10 years' experience with large contractors, familiar with all classes of heavy work such as locks, dams, retaining walls, concrete bridges, heavy earth and rock work, etc. Also thoroughly familiar with all office details, estimating, design and layout of equipment, purchasing, cost keeping, etc., desires position with concern where hard work and fidelity are required. P. W. 812, Eng. News.

ENGINEER desires position. Expert derrick or cableway runner. Massachusetts and New York City licenses. References from all former employers. Location no object. P. W. 815, Eng. News.

GRADUATE ENGINEER, 10 years' experience on construction of various types foundations, bridge piers, retaining walls, bridges, railroad construction, wants job with contractors or engineering firm as superintendent or in charge construction office. Unmarried, go anywhere. P. W. 817, Eng. News.

SALESMAN; five years' experience selling contractors' machinery; graduate Boston Tech.; wishes position selling contractors' supplies or machinery; interview Boston or New York; will go anywhere. P. W. 821, Eng. News.

PRACTICAL CONCRETE SUPERINTENDENT; fifteen years' experience in New York City, all kinds of concrete work, cement paving and cinder concrete fireproofing; experienced with foreign laborers. Good solicitor and estimator. Anywhere. P. W. 822, Eng. News.

GENERAL CARPENTER FOREMAN—By one of 12 years' experience, understands estimating of concrete work, mason work, can handle rigging, install plant; have been employed on some of the biggest foundation and construction work in the United States. P. W. 795, Eng. News, Chicago.

ENGINEER with twenty years' experience in electrical, water, sewer, power plant, railroad and general construction work; open for engagement. P. W. 802, Eng. News.

POSITIONS OPEN

MAN WHO HAS HAD EXPERIENCE in estimating waterproofing from architects' plans and specifications, and in supervising waterproofing and waterproofing repair contract work. P. 810, Eng. News.

A FIRST CLASS DRAFTSMAN, thoroughly experienced in sugar plant equipment. Send full account of experience; references; salary; age; married or single and how soon available. P. 811, Eng. News.

AN EXPERIENCED MAN with scientific training to take full charge of power plant and machinery in factory in Metropolitan District employing about 300 hands. Must have knowledge of the working of refrigerating and electrical plants; possess executive ability; and be enough of a "driver" to get results economically. Fair salary to start and good salary if applicant "makes good" after trial. P. 792, Eng. News.

CIVIL ENGINEER to take charge of drafting department of a long established company engaged in the fabrication and erection of structural steel; must be competent to design; must be able to direct men. State previous experience, age, nationality, residence and salary desired. P. 808, Eng. News.

COMPETENT QUANTITY SURVEYOR, one capable of taking off quantities and making up estimates on mason work and allied trades. References required. P. 798, Eng. News.

A HIGH GRADE MECHANICAL ENGINEER with broad experience as chief engineer in a large Brooklyn factory, only the highest type of man with executive experience need apply. Applicants to be considered must give complete details of former experience. P. 789, Eng. News.

SALES ENGINEER with proven selling ability. Excellent opportunity for young man. State full particulars regarding age, training, references, salary expected; also state if can accept position at once. P. 800, Eng. News.

HULL DRAFTSMAN—First class man required. P. 793, Eng. News.

HAVE AN OPENING for a young textile graduate (mechanical engineer preferred) to start in a business where there is an exceptional opportunity. Address giving full particulars, Room 808, 47 West 34th St. New York City.

GRADING FOREMAN; roller men and Thew shovel operator wanted for New York state highway work; season 1915. State age; experience and references in first letter. P. 794, Eng. News.

Employment Agencies

The Employment Agencies advertising in this paper agree to refund any registration fee on demand any time within the first six months when no position is secured.

SUPERINTENDENT for malleable iron plant, also general foreman for large motor shop, building motors and generators. Only high grade men need apply. The Toledo Engineering Agency, Toledo, Ohio.

BUSINESS OPPORTUNITIES

TO RENT—Large machinery house in lower part New York City will rent part of store, show window and shipping facilities to manufacturer of machine tools, steam pumps, gas engines or contractors machinery. A fine chance for party wishing New York representation. Price low. B. O. 804, Eng. News.

SALES MANAGER—A Canadian farming implement manufacturing corporation has an opening for experienced sales manager [preferably with experience in above line], to take full charge of sales department; attractive salary and commission contract guaranteed to right party; $2500 cash investment and A1 references required. This is a high grade proposition for a high grade man. Investment fully secured. Correspondence treated strictly confidential. B. O. 805, Eng. News.

FACTORY SUPERINTENDENT—Position vacant for a high grade factory superintendent, with executive ability, to take full charge of all branches of a farming implement factory in Canada; applicant must be able to invest $2500 cash and move at once to Ontario, Canada; contract with good salary guaranteed to right party; investment covered by guaranteed security. B. O. 806, Eng. News.

TREASURER—Large manufacturing corporation, established 1850, location Canada, has a vacancy for a highly efficient business man as secretary and treasurer; party must be able to invest at least $5000 cash and give best of references as to ability and character; contract with good salary guaranteed to right party; investment absolutely secured; answer in full or no attention paid. B. O. 807, Eng. News.

FOR SALE

FOR SALE cheap second hand engineering books. E. P. Dupen, Bisbee, Arizona.

ENGINEERING NEWS for sale; 1898-1907 inclusive bound and 1909-1911 inclusive unbound. F. S. 819, Eng. News.

Classified List

Second Hand Machinery, Material and Equipment

For Sale—Exchange—Rent—Wanted

Items not otherwise marked list equipment for sale.

Rates: Less than 4 insertions 55 cents per line—4 to 11 insertions 50 cents per line—12 or more insertions 45 cents per line.

N

ADDRESSES

BECKWITH, J. S., 108 Park Way, N. S., Pittsburgh, Pa.
BRADEN, James C., 26 Cortlandt St., N. Y. City.
CARPENTER & ANDERSON, Union Trust Bldg., Detroit.
CONTRACTORS' Service Co., 50 Church St., N. Y. City.
DALLETT & CO., Harrison Bldg., Phila., Pa.
DOUGLAS, Geo. B., 29 Broadway, New York.
GIVIN Co., Herbert, 30 Church St., N. Y. City.
GRIMSHAW CO., Wm. B., Drexel Bldg., Phila., Pa.
HITNER'S Sons Co., Henry A., Philadelphia, Pa.
HOISTING Engine Sales Co., 120 West 32d St., New York.
INGERSOLL, H. G., 76 William St., New York, N. Y.—Much of this equipment can be seen at work, vicinity N. Y.
LINES FLYNN Co., Inc., 30 Church St., N. Y. City.
MARINE Metal and Supply Co., 167 South St., N. Y. City.
NEW RIVER Co., The, Macdonald, W. Va.
PIPE & Contractors Supply Co., 3 Dover St., N. Y. City.
ROCHESTER—Address P. O. Box 27, Rochester, N. Y.
SAMPSON Co., Geo. H., 13 Pearl St., Boston, Mass., and 42 B'way, N. Y. C.; or Winston & Co., Brown Station, N. Y.
SOUTHERN Iron & Equipment Co., Atlanta, Ga.
STALLEY, G. T., Box 390, Cleveland, Ohio.
WHITNEY, O. R., 39 Cortlandt St., N. Y. C. (Cort. 6095).

AIR COMPRESSORS

2—Ingersoll-Rand, Cross Compound steam and air cylinders with Corliss valve gear 2500 cu. ft. capacity.—SAMPSON.

2—Ingersoll-Rand, Cross Compound Steam and Air Cylinders with Corliss valve gear 3300 cu.ft. capacity. Boilers and Condensers with this plant. All in good condition. Bargain.—SAMPSON.

1—4700 Cu. Ft. Rand B. B. 3 Compound Steam and Compound Air Compressor with Condenser.—SAMPSON.

Several second-hand air compressors, steam and belt driven, straight line and two stage of various sizes from 70 to 1300 cu. ft. capacities. Good condition.—SAMPSON.

1—22x22-13-¼x24, Sullivan, steam driven, class WB 2, straight line, 2 stage, cap., 1160 cu. ft., 1—24x24x30, McKiernan, class A, straight line, steam driven, cap. 1414 cu. ft.; 1—24x24-¼x30, Ingersoll, class A, steam driven, straight line, cap. 1223 cu. ft., 2—16x20-¼x16, Ingersoll-Sargeant, class H-1, duplex, steam driven, cap. 1540 cu. ft.—HITNER'S.

1 Blaisdell 16x10x10, 60 H.P., 342 cu.ft. First class condition. Theo. Smith & Sons Co., Jersey City, N. J.

Steam driven 3 Laidlaw-Dunn-Gordon duplex 2-stage, and 5 Norwalk tandem 2-stage, capacities 900 to 2100 cu.ft., condition excellent.—NEW RIVER.

Most items are signed with only part of the advertiser's name. Complete names and addresses in alphabetical order will be found under the heading "Addresses."

BARGES

[Wanted]

Deck barge about 34'x80'x6' steel or wood, in first class condition. Mail full particulars and location to HENRY BICKEL CO., Louisville, Ky.

BOILERS

5—250 H.P. B. & W., 150 lbs. steam. Horizontal return tubular, 2—72"x20', 1—78"x20', 1—72"x18', 1—72"x15', 1—72"x14', triple riveted, butt strapped, 125 lbs. steam.—HITNER'S.

40, 50, 60 and 80 H.P. loco. type on skids.—PIPE & C. S. CO.

75 H.P. loco. type 100 lb. pressure allowed.—INGERSOLL.

6—550 H.P. Altman Taylor B. & W. type, 150 lbs. pressure, complete with steel supporting structure—Arranged to set two in battery; one battery equipped with Taylor stokers.—HENRY R. KENT & CO., 141 Broadway, New York, N. Y.

BUCKETS

One four leaf 1 yd. Orange peel.—PIPE & C. S. CO.

5—¾ cu. yd. standard clam shells.—STALLEY.

Orange peel—¾, 1, 1¼, 1½ yd. capacity; clam shell—½ to 3 yd. capacity.—GIVIN.

⅞ yd. orange peel Smith.—INGERSOLL.

1 "Haiss" ¾ yd. and 1 "Haiss" 1 yd. clamshell, in first-class shape; used short time. Digging teeth can be installed. —GEO. HAISS MFG. CO., 142nd St. and Rider Ave., N. Y. City.

CABLEWAYS

400' for sewer work. Carson-Lidgerwood eng.—INGERSOLL.

CARS

[Standard Gauge]

7—12 yd. 2-way Oliver dump cars with air brakes.—ROCHESTER.

[36 Gauge]

40—4 yd. Western dump.—INGERSOLL.

[24" Gauge]

1½ yd. Western with Vulcan Dinkey.—DALLETT.

CRUSHERS

Farrel Jaw, 15x9, with screen and engine.—MARINE.
National Jaw, 14x8, on wheels.—MARINE.
Gyratory, Nos. 8, 7½, 6, 5, 4, 3.—GIVIN.
1 No. 2 Climax on trucks with 15' elevator with 18 H.P. mounted Climax portable engine and boiler.—BECKWITH.

CRUSHER EQUIPMENT

Stone crusher equipment including boiler, engine, crusher and 115 ft. American Steel derrick, complete. Will sell all or part.—KANAWHA LAND CO., Charleston, W. Va.

DERRICKS

1 Steel stiff leg, 70′ boom; 1 steel guy, 70′ boom, 25 tons cap.; 1 steel traveling, 45′ boom.—GIVIN.

Trav., 25′ spread, 60′ boom DD Mundy hoist.—INGERSOLL.

DREDGES

Hydraulic and dipper. Sale or charter.—GIVIN.

1—20″ Hydraulic dredge, complete with Pontoons, pipe line, etc.—ROCHESTER.

DRILLS, ROCK

6 Ingersoll, type F-24, 2 class "C" Little Giants.—BECKWITH.

ELECTRIC LIGHTS

For sale at less than half cost. Sixty 300 C.P. D.C. 220 V. Nernst arc lamps, moon globes. In perfect running condition. Can be seen in use in our offices; $4 each. (Regular price, $9.50). Price includes drop lighting switch. Must sell as our voltage is 110 in new office. HILL PUBLISHING CO., 10th Ave. at 36th St., New York.

ENGINES, GAS

1 8 H.P. Vertical Type Fairbanks with sub-base.—SAMPSON

EXCAVATORS

1 Monighan Drag Line with one and two-yd. bucket in Detroit, Mich.—CARPENTER.

FEED WATER HEATERS

Several types, capacities up to 1200 HP.—NEW RIVER.

FIRE ENGINES

2 Fire Engines, condition, first class.—HITNER'S.

HOISTING ENGINES

Lidgerwood 10x12 D.D.D.C. side by side drums, 33″ diam.—MARINE.

Lidgerwood, 5x8 D.D.D.C. with boiler.—MARINE.

12 Lidgerwood, Lambert and others. Also one 5 lever Stroudsburg 7x10 cableway engine. PIPE & C. S. CO.

2 Lidgerwood 14x18, D.C. 3-tandem drum, reversible link motion; 1 Lidgerwood, 10x12, D.C. S.D. reversible link motion; 1 Lambert, 10x12, D.C. D.D. with boiler; 2 Lambert, 8x10, D.C. D.D. with Mass. boilers; 1 Lambert 7x10, D.C. D.D. with boiler; 1 Mundy, 7¼x10, D.C. D.D. with boiler; 1 Mundy, 6¼x10, D.C. D.D. with boiler; 1 O. & S. 6¼x8, D.C. D.D. with boiler. 2 Lidgerwood, 60 H.P. D.D. and swinger d.c. hoists.—HITNER'S.

9x10 Lidgerwood 3 drum—8¼x10 Lidgerwood D.D. with or without boiler or swinger. Other sizes.—GIVIN.

TWO HUNDRED FIFTEEN hoists. Immediate delivery. 3- drum, 7x10, 8¼x10, 9x10, Skeleton or boiler.—HOISTING.

INSTRUMENTS, SURVEYING

Second-Hand Transits, Levels, etc. Bought, sold or exchanged. Send for list of Second-Hand Instruments. Get our prices before ordering. WILLIAMS, BROWN & EARLE, Inc., Engineering Supplies, Dept. E, 918 Chestnut St., Phila.

$190 Sala Lt. Mt. transit V circle, good cond., $115; $100 Buff & B. Engrs. Dumpy level, inverting, fine, $70. Guaranteed. 99 others. Rentals, repairs, supplies.—ARCHITECTS' & ENGINEERS' SUPPLY CO., Kansas City, Mo.

LOCOMOTIVES

[Standard Gauge]

1 Porter, Std. G., 20-ton, 12x18, saddle tank.—DOUGLAS

50 locomotives, Switch, Mogul, Consolidation, Ten Wheel and Saddle Tank types.—SOUTHERN.

2—40 ton switchers, overhauled.—CONTRACTORS S. CO.

[36″ Gauge]

10 10x16″ Porter, Davenport and Vulcans.—SOUTHERN.

5 9x14″ Porters.—SOUTHERN.

9x14 Porter and 10x16 Baldwin.—BRADEN.

2—9x14 Baldwin saddle tank.—BECKWITH.

5—10x16 Vulcans, 1911-12.—CONTRACTORS S. CO.

1—18 ton Porter; 1—18 ton American.—INGERSOLL.

LOCOMOTIVE CRANES

4 and 8-wheel, 10, 15 and 20 tons capacity.—HOISTING MACHINERY Co., 48 Church St., New York City.

4 and 8 wheel 10 and 15 ton.—CONTRACTORS S. CO.

15-ton Browning, 4-wheel, S. G., 50′ boom.—DALLETT.

1—7 Ton, 4 wheel, Industrial, 21′ boom; 1—15 ton, 8-wheel, Industrial, wrecking crane, 20′ boom, goose neck.—HITNER'S.

15 ton excellent condition, cheap.—STALLEY.

4 and 8 wheel, 10, 15, 20 and 25 tons capacity.—GIVIN.

MIXERS (Asphalt and Concrete)

Hadsel 2 yd. Batch, with engine,—on channels.—MARINE.

Smith ¾ yd. Batch with engine,—on skids—MARINE.

Foote (cont.) No. 3, 7½ H.P. motor D.C. on wheels.—MARINE.

Portable plant, complete capacity 300-600 yds. per day; rare bargain.—LINES FLYNN.

2—¾ yd. Ransomes with engines, on skids; 2—No. 2½ Smiths with engines, on wheels.—PIPE & C. S. CO.

1 cu.yd. Smith with engine on skids.—BECKWITH.

Haines gravity, ½ yd.—INGERSOLL.

PILING, SHEET STEEL

76 pcs. Lackawanna 14″ Arched Web, 32′ long; used on. Also several other lots.—GRIMSHAW.

About 100 pcs. 28′, fairly good, $25 ton f.o.b. cars, F. Worth, Tex.—F. N. GRAVES, Pur. Agent, Fort Worth, Tex.

PIPE

All sizes. ½″ to 18″ with perfect threads and coupling; also larger sizes. Pipe cut to sketch. PIPE & C. S. CO.

PIPE MACHINES

Saunders, Williams; from ¾ to 8″.—PIPE & C. S. CO.

PUMPS

1 Cameron 3½x2x4 Steam pump.—SAMPSON.

1 No. 8, 1 No. 9, 1 No. 10 Cameron.—MARINE.

2 Davidson Simplex 9x9x11.—MARINE.

1 Worthington Duplex 6x4x6.—MARINE.

1 Worthington Duplex 10x6x10.—MARINE.

2 Snyder-Hughes Vacuum 10x14x12 Simplex.—MARINE

1 No. 486 Emerson, 4″ suc., 3″ dis.—MARINE.

Piston and plunger, sizes up to 12x12x12.—NEW RIVER.

2 Worthington 1,500,000 gal. Horizontal, Duplex Power, 14″ diameter, 10″ stroke.—WATER & LIGHT COMMISSION, Fergus Falls, Minn.

1 Compound duplex vertical center packed plunger, circulating pump, size 21—34x19—24, capacity 3500 gallons, 24 hours.—HITNER'S.

3 Underwriters fire pumps cheap.—WHITNEY.

What is best offer before Feb. 5 on two 20x12x16 Fairbanks Morse Duplex Underwriters pumps with trimmings? Steam header included with fittings; used ten years.—ROYAL C. WISE, 9 S. Clinton St., Chicago, Ill.

RAILS

24″ and 20″ industrial rail and turntables.—PIPE & C. S. CO.

100 tons 40 to 50 lb. rails, ties, etc.—INGERSOLL.

ROAD ROLLERS

10-ton macadam in excellent condition. Low price for quick sale.—F. S. 779, Eng. News.

[Wanted]

Tandem paving roller at a bargain. Send description to W. 780, Eng. News.

SEWER PLANTS

2—Complete Sewer Contractor's Plants, including compressors and locks.—LINES FLYNN.

STEAM SHOVELS

Marion, model 60, steam shovel.—SOUTHERN.

1 ¾-yd. revolving traction, rebuilt.—LINES FLYNN.

1 70-ton Bucyrus, 2½ yd. dipper; Thew "O."—BRADEN.

2—65 ton, Bucyrus, 2½ Yd. dippers, $3000 each.—HITNER'S.

50 steam shovels, all makes and sizes; some used only two months; rent or sale. Rare bargains. Everything sold is guaranteed.—CONTRACTORS S. CO.

Thew "O" traction, high number, Mass. boiler.—DALLETT.

1 Model 0 Thew, built 1912, low price.—GIVIN.

1—Bucyrus, 18 B. traction revolving ⅞ yd.—GIVIN.

1—1¼ yd. Vulcan steam shovel.—ROCHESTER.

2—70 ton Bucyrus 2½ yd. dippers.—INGERSOLL.

SPRINKLERS

500 gal. sanitary auto. street flushing mach.—INGERSOLL.

STEEL SHEETING

124 pcs. 15′ 15″ 33 lb. and 782 pcs. 22′ 15″ 33 lb. channels with Nye locks in Detroit and Grand Rapids.—CARPENTER.

TRAVELING CRANES

1 15-ton electric 36′ 6″ span.—DOUGLAS.

One—with clam shell bucket, new and cheap.—WHITNEY.

TRENCHING MACHINES

One No. 1 Austin, good shape and a bargain. BOYD & COOK, 1018 Reibold Bldg., Dayton, Ohio.

TURBINES

2 Houston 44″ Vertical, with beveled gears, shafting, etc.—WATER & LIGHT COMMISSION, Fergus Falls, Minn.

WELL DRILLING MACHINES

1 No. 3½ Keystone well drilling machine.—ROCHESTER.

Dredge Pipe for Sale

Pontoon and Land Pipe

20 inches and 22 inches in diameter. Also casks, pontoons, elbows and valves. In good condition, will sell at one-half value. Inquire, P. O. Box 27, Rochester, N. Y.